

Name: **K.Sangeetha**

Designation: Assistant Professor

Department: Electronics & Communication Engineering

Mail ID: [sangeetha\\_k@vnrvjiet.in](mailto:sangeetha_k@vnrvjiet.in), [sangeetha4k1@gmail.com](mailto:sangeetha4k1@gmail.com)

Experience (in years): Teaching: 21 yrs      Research: Nil

Others(if any, specify): Nil



### 1.Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	Ph.D	Pursuing	Communication
2	M.Tech.	2005	Communication Systems
3	B.Tech.	1999	ECE
4	Secondary (10+2)	1995	Maths & Biology
5	10 <sup>th</sup>	1993	Matriculation Board

### 2.Teaching and Learning:

#### 2.1.Teaching Interests:

Electronic Devices & Circuits, Probability Theory and Stochastic Processes, Analog Communication, Analog & Digital Communication, Information Theory and Coding, Wireless Networks, Mobile Communication, Antenna & Wave Propagation, VLSI Design, Computer Networks, Pulse & Digital Circuits, Advanced Communications, Advanced Digital System Design and Digital Communication.

#### 2.3. Novel Teaching & Learning Techniques adopted:

WIT & WIL , POGIL, PPTs, Videos, Story Board, Lab Protocol, Quiz, Mind map

#### 2.3. Involvement in curriculum updating / Design: EDC Lab

### 3. Co-curricular and Extra-Curricular Activities

#### 3.1. Interests and Hobbies: Listening Music

#### 3.2. CCA/ECA Organized: Ebullientz 2k14 & 2k15, kTalenta2k14, 10<sup>th</sup> Graduation Day (KCET)

#### 3.3. CCA/ECA participated: Sports

#### 3.4. Counseling and Mentoring Activity: UG Students

#### 3.5. Committees involved in:

Department level: Department Exam Cell, Lab Incharge, Symposium Coordinator, Library Incharge, ECE Newsletter Incharge.

Institute Level: Held as committee head for conducting Graduation Day & College Day, TimeTable Coordinator, Lab Stock Verification, Squad, Hostel Warden.

### 4.Conference / Workshop / Seminar / Guest Lectures :

#### 4.1.Conducted:

- Workshop on “Modern Electronics Laboratory Theory, Practice & Maintenance” at Krishnasamy College of Engineering & Technology (KCET) on 4<sup>th</sup>& 5<sup>th</sup> January 2010.
- Guest Lecture on “Simulation of Computer Networks using NS2” on 21<sup>st</sup> March 2011 at KCET.
- Guest Lecture on “Fiber Optic Communication “ & Inauguration of Society of Electronics & Communication Engineers” on 29<sup>th</sup> August 2011 at KCET.
- Workshop on “Recent Trends in Embedded System Technologies” on 13<sup>th</sup> September

- National Level Conference on “Emerging Trends in Embedded Systems, Signal Processing and Communication Technologies” on 11<sup>th</sup> April 2012 at KCET.
- Guest Lecture on “Signal Processing using MATLAB & LABVIEW Software” on 29<sup>th</sup> September 2012 at KCET.
- Guest Lecture on “Fiber Optic Communication & EMF Radiation” on 5<sup>th</sup> August 2013 at KCET.
- Workshop on “Emerging Trends in Microwave Engineering & Signal Processing” on 13<sup>th</sup> September 2013 at KCET.
- Guest Lecture on “Fabrication of IC’s and MEMS” on 22<sup>nd</sup> February 2014.
- National Level Technical Symposium “kTalanta 2k-14” on 13<sup>th</sup> & 14<sup>th</sup> March 2014 at KCET.
- Guest Lecture on “Photonics and Optoelectronics” on 6<sup>th</sup> August 2014 at KCET.
- National Level Technical Symposium “Ebullientz 2k-14” on 26<sup>th</sup> September 2014 at KCET.
- Guest Lecture on “Antenna and Wave Propagation” on 1<sup>st</sup> April 2015 at KCET.
- Guest Lecture on “Digital Signal Processing” on 25<sup>th</sup> July 2015 at KCET.
- National Level Technical Symposium “Ebullientz 2k-15” on 4<sup>th</sup> September 2015 at KCET.

#### 4.2. Attended:

- Workshop on “MOBILE AD HOC NETWORKS” on 26<sup>th</sup> & 27<sup>th</sup> December 2002, at Anna University, Chennai.
- National Level Conference on “Emerging Trends in Electronics & Communication Engineering” – TECHON’08 on 8<sup>th</sup> April 2008 at IFET College of Engineering, Villupuram.
- Workshop on “Applied Mathematics in Engineering Disciplines” at KCET on 22<sup>nd</sup> March 2012.
- Two day Staff Orientation Programme on 13<sup>th</sup> & 14<sup>th</sup> July 2012 at KCET.
- Two day Staff Orientation Programme on 2<sup>nd</sup> & 3<sup>rd</sup> July 2013 at KCET.
- Seminar on “ICT ACT Bridge Chennai Edition Skills for Education, Employability & Entrepreneurship” on 21<sup>st</sup> February 2013 at Trade Centre, Chennai.
- Two days Hands-on Training Program on “TMS320C6745 DSP” on 27<sup>th</sup> & 28<sup>th</sup> April 2015 by Pondicherry Engineering College.
- FDP on “Creative Thinking by ICTACT” on 29<sup>th</sup> & 30<sup>th</sup> June 2015 at KCET.
- FDP on “Recent Trends in Signal Processing & its Applications” Organized by E& ICT Academy, NIT, Warangal & VNRVJIET at VNRVJIET, from 22<sup>nd</sup> June to 1<sup>st</sup> July, 2017.
- Workshop on “MATLAB” at VNRVJIET from 07<sup>th</sup> June to 09<sup>th</sup> June, 2018.
- Workshop on “Scientific Writing using LATEX” at VNRVJIET on 12<sup>th</sup> June, 2018.
- Short term course on “Introduction to Programming : A pedagogical Approach” Organized by E& ICT Academy IIT Kanpur, at VNRVJIET, Hyderabad from 17<sup>th</sup> to 21<sup>st</sup> June, 2019
- FDP on “Wireless and Mobile Communication” Organized by E& ICT Academy NIT Warangal, at VNRVJIET, Hyderabad from 1<sup>st</sup> to 6<sup>th</sup> July, 2019.
- FDP on “Sensor Networks and IOT” Organized by E& ICT Academy NIT Warangal, at VNRVJIET, Hyderabad from 26<sup>th</sup> to 31<sup>st</sup> August, 2019.

- FDP on “Python programming with Industry Perspective” Organized by E& ICT Academy NIT Warangal, at VNRVJIET, Hyderabad from 2<sup>nd</sup> to 6<sup>th</sup> December, 2019.
- FDP on “LaTeX & Technical Report Writing” Organized by Department of Mathematics Kakatiya University, Warangal, in Association with Spoken tutorial developed by IIT Bombay from 25<sup>th</sup> to 30<sup>th</sup> May, 2020.
- FDP on “Establishing Research Beyond Horizon” Organized by Research and Development Centre, N.K.T. National College of Education for Women, Chennai from 26<sup>th</sup> to 30<sup>th</sup> May, 2020.
- FDP on “PYTHON 3.4.3” Organized by Vaagdevi College of Engineering in association with Spoken Tutorial IIT Bombay from 1<sup>st</sup> to 6<sup>th</sup> June, 2020.
- FDP on “Cyber Security” Organized by VNR Vignana Jyothi Institute of Engineering & Technology in Association with Supraja Technologies from 02<sup>nd</sup> to 6<sup>th</sup> June, 2020.
- Workshop on “RF Design / VNA & Its Applications” Organized by Entuple Technologies from 16<sup>th</sup> to 18<sup>th</sup> June, 2020.
- Workshop on “Developing E-Content” Organized by Vaagdevi Engineering College from 18<sup>th</sup> to 19<sup>th</sup> June, 2020.
- “Effective and Efficient Online Teaching in the Age of Corona: A Hands-On Workshop” Organized by Methodist College of Engineering and Technology, Hyderabad through IIT Bombay BodhiTree Platform from 20<sup>th</sup> to 25<sup>th</sup> June, 2020.
- FDP on “IoT & Machine Learning” Organized by Department of ECE, G.Pulla Reddy Engineering College, Kurnool from 26<sup>th</sup> to 30<sup>th</sup> June, 2020.
- Workshop on “Effective online Teaching using ICT Tools” Organized by Department of CSE in collaboration with CSI, VNR Vignana Jyothi Institute of Engineering & Technology (VNRVJIET) from 29<sup>th</sup> June to 04<sup>th</sup> July, 2020
- Two day International Virtual Conference on “Biomedical Engineering and Medical Imaging Systems” organized by Department of Biomedical Engineering in association with MHRD - Institution’s Innovation Council from 06<sup>th</sup> July to 07<sup>th</sup> July 2020.
- National Level Online FDP on "Image Processing and Computer Vision-Industrial Scope" organized by the Department of ECE, Malineni Lakshmaiah Women’s Engineering College, Guntur from 8<sup>th</sup> July to 12<sup>th</sup> July 2020.
- A Two Day National Webinar on "Online Teaching" organized by Department of H&S, VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad, 13<sup>th</sup> July to 14<sup>th</sup> July 2020.
- Webinar on "SIW Technology towards 5G Applications: Miniaturization, Design and Materials" organized by IEEE-MTTs SB-Chapter association with IEEE-SB, by Dr. Maurizio Bozzi, Professor, University of Pavia, Italy, on 14<sup>th</sup> July 2020.
- Five Day online PDP on "NBA in a Nutshell" organized by Department of ECE in Collaboration with IEEE SB, VNR Vignana Jyothi Institute of Engineering & Technology from 27<sup>th</sup> July to 31<sup>st</sup> July 2020.
- Two-week Online Faculty Development Programme on “Wireless Communication Technologies for IoT” jointly organised by Electronics and ICT Academies held from 27<sup>th</sup> July to 07<sup>th</sup> August, 2020 under the “Scheme of financial assistance for setting up of Electronics and ICT Academies” of the

Ministry of Electronics and Information Technology (MeitY), Government of India.

- Successfully completed "Programming for Everybody (Getting Started with Python)" an online non-credit course authorized by University of Michigan and offered through Coursera on 28<sup>th</sup> August 2020.
- Two-week Online Faculty Development Programme on "Demystifying 5G RF ASICs" jointly organised by Electronics and ICT Academies held from 24<sup>th</sup> August to 04<sup>th</sup> September 2020 under the "Scheme of financial assistance for setting up of Electronics and ICT Academies" of the Ministry of Electronics and Information Technology (MeitY), Government of India.
- Online Training Programme on "Digital tools for Writing, Authoring & Reviewing Manuscripts jointly" organized during 21<sup>st</sup> September and 2<sup>nd</sup> October 2020. Supported by Ministry of Electronics and Information Technology (MeitY) Electronics & ICT Academies MNIT Jaipur, NIT Patna & IIT Guwahati.
- Week Online AICTE Sponsored STTP Phase-I on "AI-MIMO Millimeter (mm) Wave and Massive MIMO Applications for 5G Wireless Networks using AI from 16<sup>th</sup> to 21<sup>st</sup> November 2020 organized by Department of ECE, GRIET.
- One Week Online AICTE Sponsored STTP(Phase-III) on "AI-MIMO: Millimeter (mm) Wave and Massive MIMO Applications for 5G Wireless Networks using AI. Sub Theme - Hands-On: Deep Learning Techniques for MIMO and Signal Processing from 25<sup>th</sup> January to 01<sup>st</sup> February 2021 organized by Department of ECE, GRIET.
- Five-Day Online FDP Sponsored by AICTE, New Delhi under ATAL Academy on "Challenges in Adapting Machine Learning towards 5G/6G Communications" from 9<sup>th</sup> to 13<sup>th</sup> August 2021 organized by Department of ECE, VNRVJIET & IEEE SPS.
- IUCEE ICTIEE 2022 Webinar on "Writing research papers on the Scholarship of Teaching and Learning" by Dr. Sohum Sohoni, Milwaukee School of Engineering on 12<sup>th</sup> July 2021.
- Successfully completed the NPTEL online Certification 8 week course on "An Introduction to Information Theory" with 50% from January to March 2021.
- Successfully completed the NPTEL online Certification 12 week course on "Introduction to Machine Learning" with 73% from January to April 2021.
- Successfully completed the NPTEL online Certification 12 week course on "Qualitative Research Methods and Research Writing" with 58% from January to April 2021.
- Successfully completed the NPTEL online Certification 12 week course on "Introduction to Wireless and Cellular Communications" with 69% from July to October 2021.
- Online FDP programme on "Emerging Techniques in 6G Wireless Communication" from 04<sup>th</sup> to 10<sup>th</sup> January 2023, organized by Department of Electronics and Communication Engineering, SRM Institute of Science and Technology, Tiruchirappalli Campus.

## **5. Academic Contribution and Research & Consultancy:**

5.1. Invited Lectures: Nil

5.2. Articles/Chapters published in Books: Nil

5.3. Books published as single author or as editor: Nil

5.4. Projects Guided : a) UG :24

b) PG :07

5.5. Research Interests : Wireless Communication, RF MEMS Phase Shifter

5.6. Ph.Dstudents : Nil

a) Enrolled :

b) Submitted:

c) Awarded:

5.7. Papers published in reviewed journals :

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	Linguistic Sign Language Recognition Through Image Based Approach	International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering(IJAREEIE), Vol 4, Issue 4, April 2015	ISSN (Print) : 2320 – 3765 ISSN (Online): 2278 – 8875	1.68	International
2	Smart Windows for House Illumination	International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering(IJAREEIE), Vol 4, Issue 4, April 2015	ISSN (Print) : 2320 – 3765 ISSN (Online): 2278 – 8875	1.68	International
3	A Mecanum Wheel Based Robot Platform for Warehouse Automation	International Journal of Mechanical Engineering & Technology(IJMET), Vol 8, Issue 7, July 2017	ISSN Print: 0976-6340 ISSN Online: 0976-6359	1.25	International
4	Semi blind channel estimation with BCJR Algorithm in OFDM Systems	International Journal PENSEE, Vol 50, Issue 12 2020	ISSN NO: 0031-4773		International

5.8. Papers presented at National / International Conferences:

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Foot Neuropathy Analyser & Blood Flow Stimulator for diabetic patients	International Conference on Research vogues in Information & Communication Technologies	International	February 2014

2	Solar Smart Window with Optimized Time based Single Axis Tracking System	National Conference on “Innovative Trends in Electrical & Electronics Engineering(ITEE-2K15)	National	March 2015
3	An Improved Efficient Channel Reuse in Wireless Mesh Network with Enhanced Transmission Scheduling into Resource Allocation	International Journal of Emerging Technology in Computer Science & Electronics(IJETCSE)	International	May 2016
4	Spectral Efficiency of Non-Orthogonal Multiple Access over Orthogonal Frequency Division Multiple Access	International Journal of Analytical & Experimental Modal Analysis(IJAEMA)	International	April 2020
5	Automatic Detection and Localization of Breast Cancer from Mammogram Imaging Modality using Modified Faster RCNN	2023 5th International Conference on Smart Systems and Inventive Technology (ICSSIT)	International	March 2023

#### 5.9. Sponsored research Projects: Nil

S.No	Title	Agency	Period	Grant amount	Ongoing / Completed

#### 5.10 Consultancy Projects: Nil

S.No	Title	Agency	Period	Sanctioned Amount	Ongoing / Completed

#### 6. Awards / Honors received:

- One of the toppers(in 2%) in NPTEL Exam- Principles of Communication Part – I (96%) January-April 2019.
- One of the toppers (in 5%) in NPTEL Exam – Analog Communication (77%) July-October 2019.

**7. Motto:** Dedication towards our work. There is no substitute for hard work.